JTFCE Overview

COL Michele Hovland

J2/J6

Agenda

- Overview
- Equipment Summary
- Capabilities
- Maintenance

Overview

Fiscal year 2005, Congress authorized funding for Missouri to create a satellite-based, disaster response, communications element.

The one-year project delivered the Joint Task Force Communications Element (JTFCE).

Overview cont.

JTFCE:

- Provides data, voice communications and video teleconferencing to remote locations via satellite link.
- Emergency response and disaster relief missions
- Provides armory-like connectivity to MONG Network, except for satellite latency (~1 second).

JTFCE

DATA

- **Five Panasonic Toughbooks**
  - One server
  - One kit administration
  - Three for end users
- **Three Cisco wireless access points**
  - 802.11a standard
  - Fortress secure client required
- **Fortress secure gateway**
- **Ethernet ports for up to 30 MO domain computers**
- **Two Printers**

Communications

VOICE:

- Five Cisco 7940 IP Phones
- Connect up to eight analog phones *(not provided)*

VIDEO TELECONFERENCE (VTC):

- Tandberg 3000 Video CODEC
- 26” LCD Monitor

Satellite Dish

Satellite Module

Network Module

Radio Augmentation

Radio Augmentation

- Radio Interoperability
- Land Mobile Radios, HF, VHF, UHF, 800MHz
- 25 UHF Handheld Radios
- UHF Repeater
- Satellite Phone
- Support Equipment

Satellite Phone

- Iridium 9505A
- 1 year of service
- 500 minutes per year

Radio Module

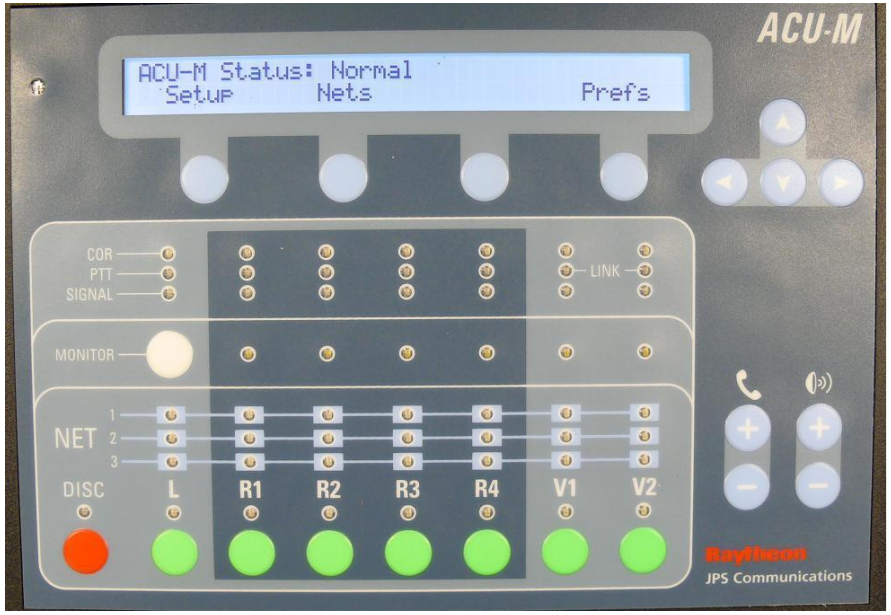
- ACU-M, HF, VHF, UHF, and 800MHz

Repeater

- UHF Repeater Analog and Digital P25

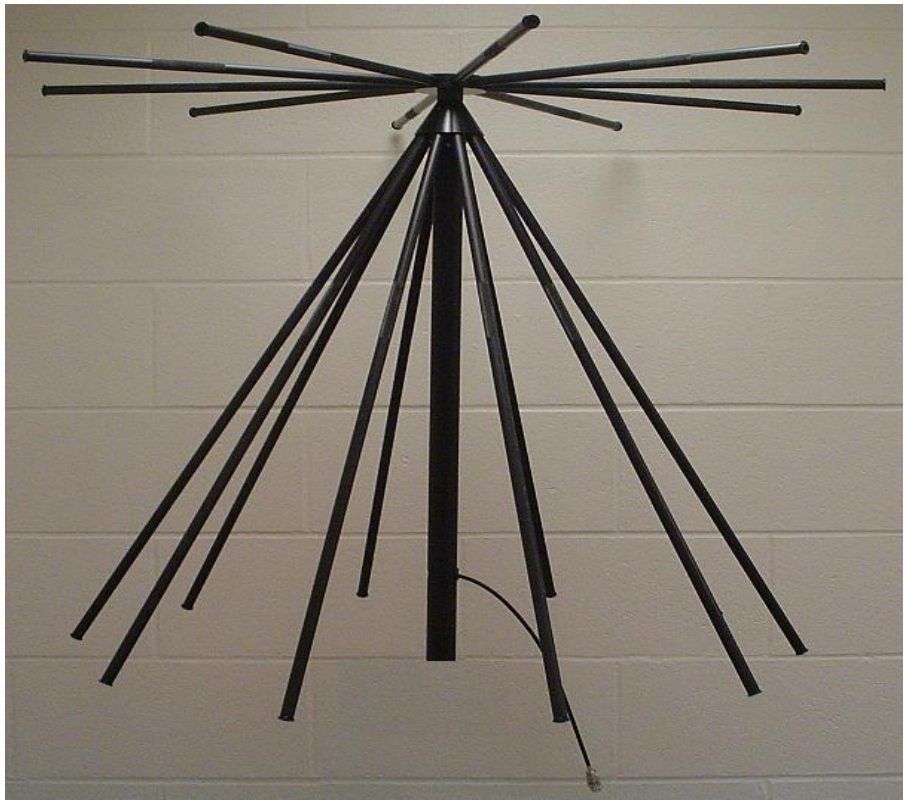
ACU-M

- Simple cross-banding device
- 4 resources (radios)
- 2 VOIP resources



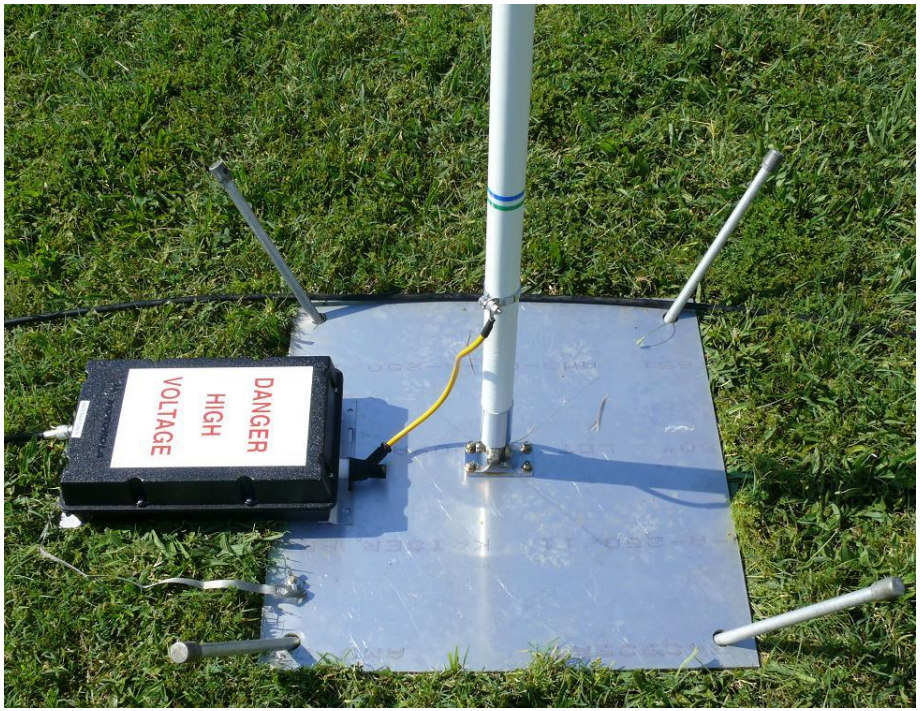
Antennas

- Tri-band for VHF, UHF and 800MHz



Antennas

- 2 Whips for UHF Repeater
- 23’ Whip for HF



Requirements

- Minimum of two people
- Shelter
- Small level spot for dish, generator and mast
- Clear view of southwest sky
- Egress for cables
- Fuel or electricity

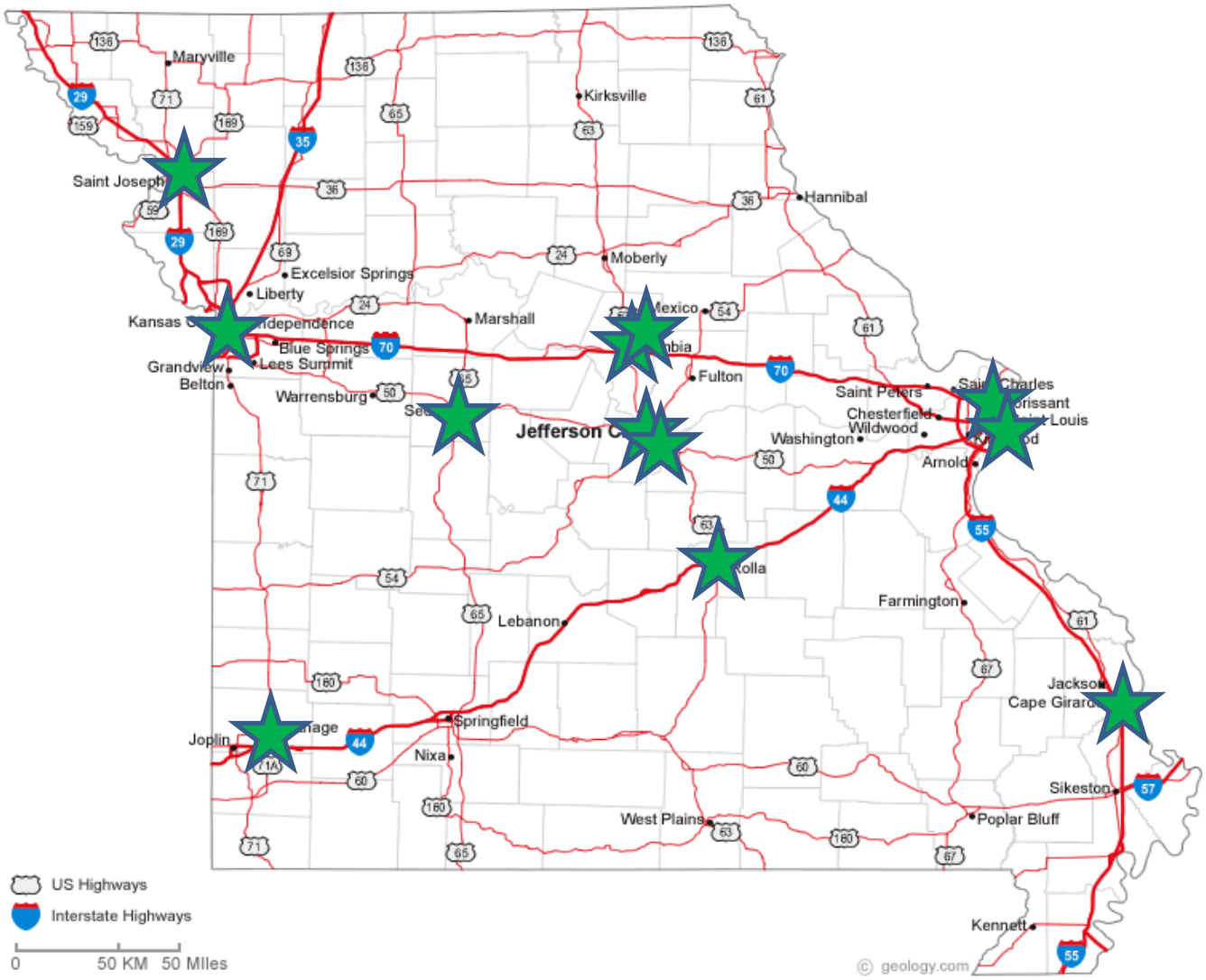
Setup time

- Approximately one hour for network
- Addition hour for radio augmentation

Maintenance

- Yearly generator service
- Yearly trailer service
- Domain laptops on network at armories for updates/patches
- Cisco IOS updates as needed
- Periodic iDirect updates from Satellite provider

JTFCE Systems



Questions